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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,249	05/04/2006	Kazuo Sato	SATO3032	6688
23364 7590 10/29/2008 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314-1176				
EXAMINER				
AL HASHIMI, SARAH				
ART UNIT		PAPER NUMBER		
2853				
MAIL DATE		DELIVERY MODE		
10/29/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/578,249

**Applicant(s)**

SATO, KAZUO

**Examiner**

Sarah Al-Hashimi

**Art Unit**

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 July 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) 3, 5-10 and 12 is/are withdrawn from consideration.  
5) ☒ Claim(s) 2, 11 is/are allowed.  
6) ☒ Claim(s) 1, 4 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/CDC)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of claims 1,2,4,11 in the reply filed on 07/28/2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 3,5-10,12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 07/28/2008.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claim 1** is rejected under 35 U.S.C. 102(b) as being anticipated by Deppe (US 4,937,766).

Deppe teaches:

**Claim 1:** acquiring means that acquires, as information on the dot, at least two-dimensional position information of an exposed section of the workpiece, and density information of the dot (abs "At least one of the sensors is directed initially towards the object for acquiring position data on a particular point of the object such as a point of intersection of two contrast lines"); coordinate setting means that calculates, for each

dot according to the density information, dot depth information showing the distance from the surface of the workpiece to the dot in the thickness direction of the workpiece, and sets three-dimensional coordinates for each dot based on a position specified by the dot depth information and the two-dimensional position information acquired by said acquiring means (col 2 lines 37-40 "one may initiate the measurement by repositioning the object into a most favorable position for purposes of defining and acquiring characteristics and measuring points" and col 1 lines 67-8 and col 2 lines 1&2 "the angular position of the sensors in that instance have in relation to each other is used to acquire positional data of the characteristic point in a three-dimensional coordinate space"); and laser marking means that performs marking with the three-dimensional coordinates as a laser beam focal point (col 2 lines 18-23 "it is suggested to provide a characteristic point on the object with an external marker to serve as a reference. This does not mean that it has to be a permanent marking but, e.g. the marking may be done through a highly concentrated light beam as a laser beam being projected onto the object").

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Deppe (US 4,937,766) in view of Tait (US 2003/0219577).

**Deppe** does not teach but **Tait** teaches:

**Claim 4:** the workpiece is made of a light transmitting resin material, and comprises a core material, which is a colored material having light reflectivity, on the rear surface of the workpiece (para 20 "the microlayers are sufficiently thin so that light reflected at a plurality of the interfaces undergoes constructive or destructive interference in order to give the film body the desired reflective or transmissive properties" and para 25 "colored mirror films").

**Therefore** it would have been obvious to a person having ordinary skill in the art to modify Deppe to incorporate a workpiece formed by a light transmitting resin material, and a core material which is a colored material having light reflectivity, and is built up on a rear surface of said workpiece as taught by Tait because the material can absorb the laser energy in order to formulate the workpiece without damage and the laser marking is more lucid when observing the interaction of the laser with the coloring.

***Allowable Subject Matter***

5. Claims **2,11** are allowed.
6. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claims 2,11 is the inclusion of the limitation of an object to be marked that includes a marking information setting means that calculates, for each dot according to the density information, dot depth information showing the distance from the surface of the workpiece to the dot in the thickness direction of the workpiece, and dot diameter information showing the diameter of the dot, sets three-dimensional coordinates for each dot based on a position specified by

the dot depth information and the two-dimensional position information acquired by said acquiring means, and sets the dot diameter information for each dot in the three-dimensional coordinates, thereby forming marking information for each dot. It is this limitation found in claim 2, as it is claimed in the combination of, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

### ***Response to Arguments***

7. Applicant's arguments filed 03/27/2008 have been fully considered but they are not persuasive.

Applicant argues that the Deppe patent fails to calculate dot depth information based upon the dot density information. However, on p.3 of the arguments it is acknowledged that the Deppe patent discloses a method and device for the acquisition of three-dimensional data, and again it is pointed out from the rejection of claim 1 that "the angular position of the sensors in that instance have in relation to each other is used to acquire **positional data of the characteristic point in a three-dimensional coordinate space**". Applicant argues that although "the Deppe patent can detect the three dimensional positioning of a spot...they do not acquire density information of a dot". This doesn't make sense. Three dimensional information about the dot must include depth information. Since this is the crux of applicants argument with respect to claims 1 and 4, all rejections stand. Applicant is advised to review the allowable subject matter which appears to further distinguish over the Deppe patent in particular.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Al-Hashimi whose telephone number is 571 272 7159. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571 272 2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either PAIR or Public PAIR. Status information for unpublished applications is available through PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SA/

/Stephen D Meier/  
Supervisory Patent Examiner, Art Unit 2853